INSTALLATION AND OPERATING INSTRUCTIONS

LUX

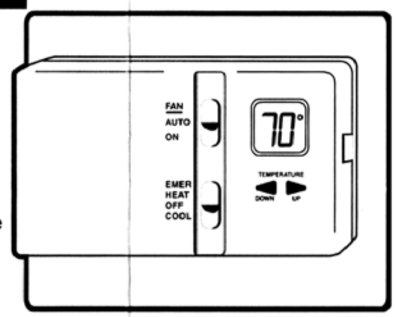
105/2110 Series

HEAT PUMP DIGITAL MECHANICAL THERMOSTAT

43318
REV C

IMPORTANT!

READ THE INSTALLATION INSTRUCTIONS FIRST Thank you for your confidence in our product. To obtain the best results from your investment, please read these instructions and acquaint yourself with your purchase before installing your new thermostat. Then follow the installation procedures, one step at a time. This will save you time and minimize the chance of damaging the thermostat and the systems it controls.



These instructions may contain information beyond that required for your particular application. **Please save for future reference.**

FEATURES

- The thermostat can be used with most Two Stage Heat, One Stage Cool Heat Pump Systems. It cannot be used with 120 volt heating systems. Ask your dealer for other LUX thermostats to control those systems.
- A large easy to read display shows you the current room temperature at all times.
- Indicators in the display show current system status.
- The thermostat has a built in digital control system to accurately control the temperature in your home.
- The thermostat will learn the temperature characteristics of your home on a cialy basis and customize the control to give you the best comfort possible from a digital thermostat.
- You can also select a tighter temperature control if comfort is preferred over energy savings.
- A press of either the Temperature Up or Down key will reveal the current Set Temperature.
- A 4-minute minimum off time in COOL prevents your air conditioning system from being damaged.
- Two "AA" batteries are required.

CAUTION

- *Your thermostat is a precision instrument. Please handle it with care.*
- *Turn off electricity to the appliance before installing or servicing thermostat or any part of the system. Do not turn electricity back on until work is completed.*
- *Do not short (jumper) across electric terminals at control on furnace or air conditioner to test the system. This will damage the thermostat and void your warranty.*
- *All wiring must conform to local codes and ordinances.*
- *This thermostat is designed for use with 24 volt and millivolt systems. The thermostat should be limited to a maximum of 1.0 amps; higher amperage may cause damage to the thermostat. If you are in doubt, call your utility company.*

INSTALLATION

Please read all instructions carefully before beginning installation.

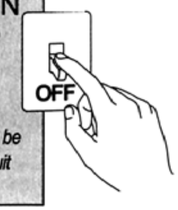
TOOLS REQUIRED

#1 Phillips screwdriver (small)

Drill with 3/16-in. (4.8mm) bit

CAUTION

To avoid electrical shock and to prevent damage to the furnace, air conditioner, and thermostat, disconnect the power supply before beginning work. This can be done at the fuse box, at the circuit breaker, or at the appliance.



THERMOSTAT LOCATION

On replacement installations, mount the new thermostat in place of the old one unless the conditions listed below suggest otherwise. On new installations, follow the guidelines listed below.

1. Locate the thermostat on an inside wall, about 5 ft. (1.5m) above the floor, and in a room that is used often.
2. Do not install it where there are unusual heating conditions, such as: in direct sunlight; near a lamp, radio, television, radiator, register, or fireplace; near hot water pipes in a wall; near a stove on the other side of a wall.
3. Do not locate in unusual cooling conditions, such as: on a wall separating an unheated room; or in a draft from a stairwell, door, or window.
4. Do not locate in a damp area. This can lead to corrosion that will shorten thermostat life.
5. Do not locate where air circulation is poor, such as: in a corner or an alcove; or behind an open door.
6. Do not install the unit until all construction work and painting has been completed.
7. This thermostat does not require leveling.

REMOVING THE OLD THERMOSTAT

Switch electricity to the furnace and air conditioner OFF; then proceed with the following steps.

1. Remove cover from old thermostat. Most are snap-on types and simply pull off. Some have locking screws on the side. These must be loosened.
2. Note the letters printed near the terminals. Attach labels (enclosed) to each wire for identification. Remove and label wires one at a time. Make sure the wires do not fall back inside the wall.
3. Loosen all screws on the old thermostat and remove it from the wall.

CAUTION

Read instructions carefully before removing any wiring from existing thermostat. Wires must be labeled before they are removed. When removing wires from their terminals, ignore the color of the wires since these may not comply with the standard.

MOUNTING THE UNIT ON THE WALL

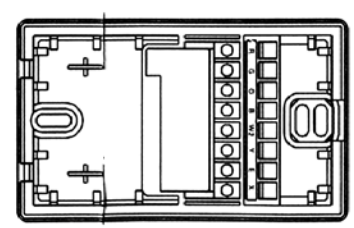
1. Strip insulation 3/8 in. (9.5mm) from wire ends and clean off any corrosion.
2. Fill wall opening with non-combustible insulation to prevent drafts from affecting the thermostat
3. Press in on the button on the right of the thermostat and swing the body away from the base and left to remove the body from the base.

NOTE

If you are mounting the base to a soft material like plasterboard or if you are using the old mounting holes, the screws may not hold. Drill a 3/16-in. (4.8mm) hole at each screw location, and insert the plastic anchors provided. Then mount the base as described below.

ATTACHING WIRES

4. Hold the base against the wall, with the wires coming through the hole provided. Route the wires to below the terminal block. Position the base for best appearance (to hide any marks from an old thermostat). An optional wall plate is available. Attach the base to the wall with the two screws provided.





OPERATION

6. Press either the TEMPERATURE UP or DOWN key in order to show the current SET TEMPERATURE.
7. Press TEMPERATURE UP or DOWN keys again until your desired temperature is displayed. The display will show the current room temperature again after two seconds.

N O T E
If you have an electric system and the blower does not operate after installation, find the electric/gas heat jumper on the back of the body. Move the jumper to the two pins indicated by ELEC.

ADVANCED FEATURES

TEMPERATURE SWING

A thermostat works by turning your heating or cooling system on and off whenever the room temperature varies a certain number of degrees from the set-point temperature. This variation is the "swing."

Your thermostat is carefully tuned to provide you with exceptional comfort as well as provide you with energy savings. Should you desire to have the temperture controlled even more tightly in your home at the expense of increased energy savings, you can change the swing value. Also users of forced hot water systems may find this setting more comfortable.

Located on the back of the thermostat body are two jumpers

To change from 0.5°F control to 0.25°F control, remove the jumper indicated by 0.5°F / 0.25°F.

Press the small unmarked button on the front of the thermostat with a paper clipfor the cange to take affect. The unit will now control you home to 0.5 degrees.

CHANGING FROM °F TO °C

- To change to Celsius - remove the jumper marked - C/F.
- Press the small unmarked button on the front of the thermostat for the changes to take effect.

TECHNICAL SERVICE

If you have any problems installing or using this thermostat, please reread the instructions carefully. Technical Service is available through our Technical Service number. If you require assistance, please call our offices between 8:00 a.m. and 4:30 p.m. Eastern Standard Time, Monday through Friday. The number is (856) 234-8803.

WARRANTY

Limited Warranty: If this unit fails because of defects in materials or workmanship within one year of date of original purchase, LUX will, at its option, repair or replace it. This warranty does not cover
damage by accident, misuse, or failure to follow installation instructions. Implied warranties are limited in duration to one year from date of original purchase. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Please return malfunctioning or defective units to the participating retailer from which purchase was made, along with proof of purchase. Please refer to Technical Service Section before returning thermostat.

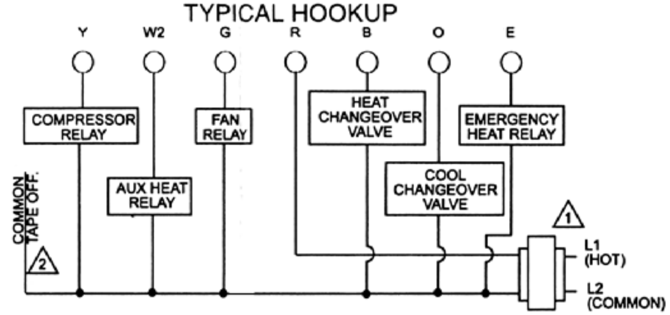
Purchaser assumes all risks and liability for incidental and consequential damage resulting from installation and use of this unit. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. Applicable in the U.S.A. only.

C A U T I O N
Do not allow wires to touch each other or parts on thermostat. Wires must be trapped between black spacer and brass terminal. Also, be sure to tighten securely all 5 electrical terminal screws.

TERMINAL DESIGNATIONS AND DESCRIPTIONS

OLD TERMINAL DESIGNATINS	NEW THERMOSTAT TERMINAL DESIGNATIONS	TYPICAL CONNECTION
B	B	Heating Changeover Valve
C, X, X1, X2, Z	Tape Off	Common
E, K	E	Emergency Heat Relay.
G, F	G	Fan Relay
L, A, A1	Tape Off	Check Heat Pump indicator
O	O	Cooling Chageover Valve
R, V	R	24V system or heating transformer
W2, H2, R4, W3, Y	W2	Stage 2 heating relay or auxilliary heat relay
Y, C1, M, Y1	Y	Stage 1 compressor contactor

TYPICAL HOOKUP



1. POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

2. IF YOUR OLD INSTALLATION HAS A "C" WIRE (COMMON WIRE FROM THE TRANSFORMER, TAPE IT OFF. IT IS NOT USED ON THIS THERMOSTAT.

SETTING THE FAN AND SYSTEM SWITCHES

FAN ON	The fan runs continuously for increased air circulation.
FAN AUTO	Normal setting. Fan is energized with the system.
EMER	Auxilliary Heat is used for heating. The compressor is deenergized.
HEAT	The thermostat controls your heating.
OFF	Both heating and cooling are off.
COOL	The thermostat controls your cooling.

INSTALLING BATTERIES/ MAINTENANCE

The DMH100 requires batteries to operate your furnace. Replace the batteries when the REPLACE indicator appears in the display or at least once a year.

N O T E
If you have an electric system and the blower does not operate after installation, find the electric/gas heat selector on the back of the body. Move the selector to the ELEC position.

1. Remove fresh batteries from their carton.
2. Remove body of thermostat as described during installation.
3. Remove the used batteries.
4. Install TWO new "AA" size alkaline batteries in the battery compartment. Observe the polarity marking shown in the compartment.
5. Place the body back on the wall. Hook the top of the body onto the base, swing the body down and snap the body onto the base.

Installation is now complete. Be sure to turn the power back on to your heating and/or air conditioning system. Within 90 seconds the thermostat will begin to display the room temperature.